

WE CLAIM:

1. A system for content management that automatically determines when a content page contains out of date content items as a result of changes made to the content items in a data source, the system comprising:

5 a template engine for executing templates to generate a content page, the template engine operative to generate a content page comprising content items selectively retrieved from a data source and arranged on the content page as defined by the template, each content item in the data source being associated with time stamp information to indicate the last time the content item was modified;

10 a dependency record for storing information regarding a relationship between content items that comprise the content page and the content items stored in the data source; and

15 dependency checking software for comparing information contained in the dependency record with time stamp information contained in the data source for each content item that comprises the content page, determining through the comparison those content pages that contain content items that have been modified in the data source, and instructing the template engine to re-generate a content page that contains modified content items.

2. The system of claim 1, wherein a plurality of dependency records are used to store the relationship between the content items that comprises the content page and the content items stored in the data source.

20 3. The system of claim 1, wherein the content page generated by the template engine comprises markup code.

4. The system of claim 3 wherein the markup code is HTML.

5. The system of claim 3 wherein the markup code is XML.

6. The system of claim 1, wherein the dependency record contains parameters comprising name/value pairs of the information that are passed to the template engine to generate the content page.

7. The system of claim 1, wherein the dependency record comprises the address within the data source of the content items that comprise the content page.

8. The system of claim 1, wherein the dependency record comprises queries executed by the template engine to retrieve content items from the data source.

9. The system of claim 1, wherein the dependency record comprises sub-template scripts used by the template engine to generate a content page.

10. The system of claim 1, wherein the dependency record comprises the time the content page was generated.

11. The system of claim 10, wherein the dependency record comprises the date the content page was generated.

12. The system of claim 1 comprising content management software to manage content items and operative to issue instructions to the dependency checking software to re-generate a content page upon modification of a managed content item.

13. The system of claim 12, the content management software operative to issue instructions to the dependency checking software to re-generate a content page upon modification of a template.

14. The system of claim 1 comprising one or more dependency records to store information regarding the relationship between a template and the content items that comprise the content page.

15. A method for determining when a content page contains out of date content items as a result of changes made to a template or content items stored in a data source, the method comprising:

generating a template to define the content items to be included in the content

5 page and the arrangement of the content items on the content page;

executing the template with a template engine to generate the content page as defined by the template;

generating one or more dependency records to capture a relationship between the content items that comprise the content page, the template used to generate the content page, and the content items stored in the data source; and

comparing data contained in the dependency records with data contained in the data source to determine if the content page is out of date.

16. The method of claim 15 comprising generating dependency records to capture parameters passed to the template engine.

15 17. The method of claim 15 comprising generating dependency records to capture database reads made by the template engine.

18. The method of claim 15 comprising generating dependency records to capture queries made by the template engine.

20 19. The method of claim 15 comprising generating dependency records to capture sub-templates defined by the template and executed by the template engine.

20. The method of claim 15 comprising publishing the content page generated by the template engine to a disk.

21. The method of claim 15 wherein the step of executing the template with the template engine generates markup code.

22. The method of claim 21 wherein the step of executing the template with the template engine generates HTML code.

5 23. The method of claim 21 wherein the step of executing the template with the template engine generates XML code.

24. A method for generating one or more dependency records that can be used to determine when content items that comprise a content page have been modified, the method comprising:

10 generating a template to define the content items to be included in the content page and the arrangement of the content items on the content page, the content page comprising content items stored in a data source;

15 executing the template with a template engine to generate the content page as defined by the template; and

20 generating one or more dependency records to capture a relationship between the content items that comprise the content page, the template used to generate the content page, and the content items stored in the data source.

25 A method for determining when a content page contains content items that are out of date, the content page generated by instructions contained in a template that identifies content items stored in a data source for inclusion in the content page, the method comprising:

storing one or more dependency records to capture a relationship between content items that comprise the content page, the template used to generate the content page, and the content items stored in the data source;

comparing the data contained in the dependency records with data contained in the data source to determine if the content page is out of date; and

regenerating the content page where the comparison step determines that the content page contains modified content items.

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